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ANNUAL ADDRESS DELIVERED BEFORE THE AMERICAN ACADEMY OF MEDICINE.

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BY

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GENTLEMEN—FELLOWS OF THE ACADEMY:—It was not my privilege to have been one of the founders of this society, but I was honored with membership at so early a period of its existence, as to have participated somewhat in the deliberations which were to control its permanent organization, and shape its future policy. I may be permitted, therefore, to speak on this occasion—our annual meeting—of what I consider to be its purposes, functions and destiny.

The purposes or objects of this association, are thus broadly stated in the second article of our constitution :

“First.—To bring those who are alumni of classical, scientific and medical schools into closer relations with each other.

“Second.—To encourage young men to pursue regular courses of study in classical or scientific institutions, before entering upon the study of medicine.

“Third.—To extend the bounds of medical science, to elevate the profession, to relieve human suffering and to prevent disease.”

The founders of this society sought, especially, by its organization to aid others who are engaged in similar efforts in this country, but who are working by other means, to remedy a great, and universally admitted evil—namely, imperfect preparation for the study of medicine, and its almost inevitable sequence, imperfect qualification on the part of those who are admitted to practice.

NATURE AND EXTENT OF THE EVIL.

It is pertinent to enquire into the exact nature and extent of this evil, its causes and consequences; and also to consider whether our organization is likely to aid those who, in common with ourselves, are searching for a remedy.



For many of the facts which I shall present, I am indebted to the statistical labors of Dr. Pepper, of Philadelphia (1), and to the similar labors of Dr. Green, my distinguished predecessor (2). Both of whom have occupied themselves in a careful study and record of the construction of medical colleges, of the character of licensing boards, the rules governing matriculation, the periods of study, and the qualifications of graduation, both at home and abroad.

Additional information upon the subject of medical education, in this country especially, may be obtained from the reports of the commissioners of education at Washington, and from the address of Dr. Sibbet, the originator and founder of this association (1).

REQUIREMENTS OF FOREIGN SCHOOLS.

From these reliable sources of information, and from others which have been consulted, I may state that a thorough preliminary education, generally equal or superior to the acquirements demanded for the degree of A.B. in the colleges of arts and sciences in this country, is the absolute condition for matriculation as a student of medicine, in Germany, Austria, Russia, Sweden, Norway, Denmark, France, Holland, Belgium, Italy, Portugal, Chili, Venezuela and Spain.

In all the countries named, also, the curriculum of study is carefully graded, the advance from one grade to another being only after a thorough examination; and the shortest time of pupilage is four years, nine months of each year being given to college and hospital instruction. In some of the States named, the term of study is extended to seven years. All of the professors, so far as I have learned, are salaried, and in no manner dependant upon the students for their pay. The final examinations for licenses to practice are made by independent boards.

Great Britain, with its colonial dependencies, Canada and Australia, has always been less exacting. The preliminary requirements for matriculation are lower. The courses of study in the colleges and hospitals are shorter; they are not so systematically graded; fewer examinations for promotion are required, and the professors depend upon the students for their compensation. Government determines the number and location of the colleges, but provides no salaries for the teachers.

Within the last year or two, the English system has undergone some improvement, but the statements above made apply to its present condition.

(1) Address before the Medical Department of the University of Pa., by Wm. Pepper, A.M., M.D., Prof. Clinical Med., Oct. 1, 1877.

(2) Address before American Acad. of Med., at its 1st annual meeting in New York, Sept. 11, 1877, by the President, Prof. Traill Green, A.M., M.D., L.L.D.

(1) Address read at the first meeting of the American Academy of Medicine, by the Secretary, L. Lowry Sibbet, A.B., M.D., of Carlisle, in Philadelphia, Sept. 6, 1876, on the necessity of an organization which shall encourage a higher standard of qualifications in the medical profession of the United States. Published in the Transactions of the Society for 1877.

REQUIREMENTS OF THIS COUNTRY.

The laws regulating medical education in this country, and the practice of medical colleges and of other authorized licensing boards, has been of late years so much discussed in our medical societies and journals, that the subject must be painfully familiar to you all.

With 4 or 5 exceptions, licensing boards in this country, including the medical colleges, demand no certificate of preliminary education, nor do they demand any preliminary examination. The courses of instruction are not graded: There are no examinations in course for promotion. The term of study required never exceeds 3 years—the actual time of attendance upon college instruction required never exceeds 10 months for the whole period of 3 years, and generally not more than 8 months, and in some cases still less. The examinations for license and for the degree of M. D., are made by the professors themselves, or by the professors, aided by a board appointed by themselves, and who seldom or never take any active part in the examinations. The professors receive no salaries, but are dependent wholly upon the size of their classes for their remuneration.

In the four or five exceptional cases, there has been within a few years an attempt made to improve the plan of instruction by demanding in some cases, certain preliminary qualifications, by grading the studies, and in one case by rendering the professors wholly independent of the pupils, by fixed salaries from permanent or transient endowments: but in neither of these cases have the reforms been such, either in character or degree as to bring the standard of education to a point anywhere near that of foreign schools.

PROPORTION OF PHYSICIANS TO THE POPULATION ABROAD AND AT HOME.

The German empire has a population of 41,060,695, with 13,686 physicians. Germany has therefore about 1 physician to every 3000 of its population. About 550 are licensed annually, of whom probably 100 emigrate to other countries, leaving about 450, perhaps not more than 400, as the actual annual supply. Yet it has never been intimated that Germany suffers for want of physicians.

The population of the United States is 44,874,814., with 62,383 physicians, according to the census of 1870. Dr. Pepper estimates that there were in 1877 at least 60,000; but Dr. Sibbet raises the estimate to 80,000. We have therefore it is safe to say 1 physician to every 600 of the population. The colleges license about 3000 annually. According to the report of the Commissioner of Education above referred to, there were 3177 degrees conferred in course during the preceding year; this enumeration including colleges of Dentistry and Pharmacy.

Lest it might be supposed that this large proportion of physicians to the population was rendered necessary by the sparseness of the population in certain portions of the United States, we will state that New York State has 6810 physicians, or 1 to every 642 of the

people ; and the District of Columbia, our seat of government, has 1 physician to every 404 of the population.

I have compared our condition with that of Germany, only because the population of the two countries is so nearly the same, that the difference can be easily carried in the mind. The contrast between our supply of doctors, and the supply existing in some other civilized countries, is much greater than in the case of the comparison I have just instituted. For example, Sweden has but one physician to every 7000 of the population ; Venezuela and Chili have 1 to 9000, and Brazil has 1 to 10,000.

Here then is a department of industry in which we have led the world, namely, in the manufacture of doctors. It is a somewhat remarkable fact, however, that notwithstanding the enormous, and what might seem excessive production, and which is increasing at the rate of about 3000 a year, there does not appear to have been created any foreign demand for the article. On the contrary, by most governments its introduction and use is forbidden, on the ground that our certificates as to the quality of the fabric are not reliable. Some specimens are admitted to be good, but others with the same endorsements, are known to be very bad ; and foreign governments choose to reject the whole, rather than to subject each to a special examination. (1)

It will perhaps interest those young men who are pursuing the study of letters in this college ; and who contemplate entering upon the study and practice of medicine, to know that it has been lately estimated that nearly one half the population in this country receive their medical services gratuitously ; so that the proportion of physicians to the paying population is about 1 to every 300. In this sense at least, ours is a "liberal" profession. The most so of all other professions or callings.

SOURCES OF THE EVIL.

In searching for the sources of the great evil of which we complain, I think we must go a long way back. Our present system of medical education is an inheritance from Great Britain. Our medical colleges were founded, and organized upon the model of the British Schools, which probably, was not the best system at the time of its adoption by us, and certainly is not now.

This system, the distinctive features of which I shall presently describe, has caused in Great Britain a depreciation in the standard of medical education ; or to say the least, it has prevented the advance of medical education in an equal proportion to the advance of medical science, and has allowed her schools to fall in the rear of other European Schools.

The medical men and the statesmen of Great Britain clearly under-

(1) The Commissioner of Education states that from 99 Medical Colleges, including Pharmacists and Dentists and the irregular colleges, there were for the year 1874, 9,095 students reported, and that of these, only 733 are shown to have received a degree in Letters or in Science

stand and publicly declare, that many of their licentiates have very imperfect qualifications. It is with them a constant subject of complaint and deprecation, and has led to much discussion and many suggestions as to the proper remedy. Great improvements have lately been made, but it does not appear to me that they have yet discovered or reached the main source of the difficulty; and I confidently predict that the increased rigor recently observed in the preliminary and final examinations, will prove to be temporary, and that all the numerous licensing bodies of Great Britain—including even the Archbishop of Canterbury himself, who is by ancient right authorized to grant licenses to practice medicine—will soon relax into their former inefficiency.

Dr. Apjohn, speaking to the General Medical Council of Great Britain, said recently, "Some years ago the practise of conferring full medical degrees upon students who had no education in arts was exceedingly prevalent. It was a scandalous practise."—*Dr. Green's Address. (From Med. Times and Gazette, 1877.)*

Dr. Farr said, "It has become a matter of public concern that it is difficult to supply the vacancies in the army medical staff with competent practitioners."—*Ibid, 1877.*

Sir Wm. Gull, addressing the same body, said, I believe that up to the present time the preliminary examinations have been conducted, very generally, by the Medical Faculty, and that is what we want to get rid of. We want to establish that preliminary examinations should be conducted by persons whose minds are directed purely to education, apart from what is technical."—*Ibid.*

* * * "Up to this time, I may say, that the preliminary education examination has been good for nothing as a means of selecting men for entering the profession."—*Ibid.*

THE FUNDAMENTAL DEFECT OF THE ENGLISH AND AMERICAN SYSTEM.

Let me now explain what seems to be the fundamental and fatal defect in the English and American system, and that which is the direct and inevitable source of all the other defects.

In all the European countries, and, so far as I can learn, in all civilized countries, except in Great Britain with its dependencies and the United States—that is to say, in all except the English speaking nations—the *professorships are endowed*; thus rendering the pay of the professors or teachers independent of the fees received from the medical students.

The plan or system of support, or of dependence upon the tuition fees alone for the support of the professors—and which necessarily demands that the conditions of admission and of licensing shall rest mainly, if not exclusively with the professors—has worked badly in Great Britain, and in all her colonies, including the United States; but it has worked worse in this country since we became independent of Great Britain. While we remained a colony, so early as the year 1765, the medical department of the University of Pa., was organized at Philadelphia without endowment; but at first no student was admitted to matriculation without a thorough preliminary education. Only one

other medical college, the medical department of King's Col. N. Y., was established in this country until after the Declaration of Independence ; and from that time all the medical colleges, except the University of Pa., omitted to recognize the importance of preliminary education ; and in 1811 this condition was formally abolished at the University of Pa. Several new medical colleges had been established, not one of which demanded preliminary education ; and the competition had become so sharp, that an abatement of the requirements for admission had to be made, or the college at Philadelphia would have lost its position as the leading school.

In Great Britain the number of colleges was, and still continues to be, limited by the general government ; and so, also, in the English colonies ; but when these colonies became independent, each state claimed the right to do its own teaching, and most of the states were not slow to exercise their right. The trade was free ; and so the new industry sprang up, and has attained its present vast proportions. We had in 1876, 78 medical colleges empowered to grant licenses to practice medicine and surgery, namely, 63 Regular, 11 Homœopathic and 4 Eclectic. This does not include colleges of Pharmacy and of Dentistry, although it is well understood that both Pharmacists and Dentists more or less encroach upon the practice of both medicine and surgery in this country. Nor is any account made of other licensing boards in no way connected with the colleges, which exist in some of the states.

If you attach any value to the opinions of the world upon our system of medical education, you will listen to what was said in the *Gazette Hebdomadaire* for Jan. 12, 1877, quoted by Dr. Green in his annual address, "The number of quacks in England is considerable, but it is much greater in the United States. Medical education in the United States is more than defective—it is bad."

REMEDY.

To those born and educated abroad, and who have no acquaintance with the machinery of our government, and with the character of our people, the problem before us, no doubt, may appear to be of easy solution. It is only to copy their example. There are many medical men, also, born and educated in this country, but who have had no practical experience in the business of teaching and of licensing, who believe the remedy could be easily found. They have from time to time suggested various and dissimilar remedies, some of which they have been permitted to see tried ; but notwithstanding all their efforts they are compelled to make the humiliating admission that the reforms have not come.

The Federal Government.

The general policy of our government is opposed to centralization ; and the powers of Congress have been limited to those matters in which a central control was deemed more essential or absolutely necessary. In matters of education, through the Bureau of Educa-

tion, it exercises a surveillance. It collects, arranges and distributes statistical information; but it seldom ventures even to recommend, much less does it attempt, or has it authority to control—education.

The Federal Government has, therefore, never attempted to regulate medical education in this country, nor is it probable that it will ever do so. To those who will take the trouble to read the discussions both in and out of Congress, pending the establishment of the Bureau of Education at Washington, only six years ago, the evidence will be conclusive, that the Federal Government will not be permitted at present, and perhaps at no time in the future, to assume the management and control of education. The states claim this as among their many reserved rights, and they are not likely soon to relinquish it.

We have also a Bureau of Agriculture; but like the Bureau of Education its functions are merely to collect and diffuse information.

The State Governments.

Our Union consists at present of 38 States and 10 Territories, including the District of Columbia. Thirteen of these States are as old as the foundation of the government. The remainder have been added from time to time; and certain territorial districts are now waiting for admission. The process of our construction is, therefore, still incomplete. All of our Territory is not yet formed into States, for the reason that, excepting the District of Columbia, these Territories have not yet the required population to entitle them to a State organization. As Territories they are under the exclusive control of the general government, but as soon as they attain the rank and title of States, they become in a great measure independent of the general government.

Each one of these States has, we repeat, full control of its own educational interests; and they have seldom failed to exercise their authority in one way or another, but scarcely any two in precisely the same way. Some have recognized the right of all those who choose to practise medicine, and to collect their fees as for any other labor or service; other States have limited the right to practise to certain conditions, more or less severe.

As to the value of all that has hitherto been done by State legislation, a correct opinion may be formed by referring to the facts already given. State legislators have seldom sufficient knowledge of, or interest in the subject, to establish and maintain a proper system of medical education. But it is only due to our legislators to say, that in most, if not all cases, the system actually established, is all, or nearly all, that the profession and the colleges have asked for. I have never heard of an instance in which the State has been asked, formally, to establish a grade of medical qualification equal to, or in any measure approaching that adopted in most other countries. It is not improbable that in some instances it would have been done, if the request had been made seriously. The reason why it has not been demanded by colleges and the profession is, I presume, that if such a system were adopted, unless the colleges were fully endowed at the

same time, the schools would be deserted; inasmuch as students could get their licenses to practise much sooner and with much less cost in other States. A license to practise in one State is not necessarily a license to practise in another, but owing to the close proximity and free intercourse between the States, it has never been found possible to prevent wholly the licentiates of one State from practising in another.

Occasionally the state has appropriated small sums of money to medical colleges; and in one instance the state appropriations, aided by the use of government lands and funds (1), proved sufficient to endow partially the college and its professorships; and then arose a new subject of difficulty. The state claimed the right to establish professorships in all the various forms of medical dogmas, and this right it has exercised to the great mortification of the original medical faculty, and to the great detriment of the college.

The experience of this college—the medical department of the University of Michigan—stands now as a grave warning to other medical colleges; and most of them would to-day hesitate to put themselves under the power of the state. Preferring to lose the endowment, rather than to submit to the humiliation and disgrace of being associated with empirics in the education of medical students.

So far as dependence upon the state legislatures is concerned, then, we may conclude, they will do nothing for us in the future that they have not done in the past. They are not likely to endow our colleges, and if they do they will pretty certainly accomplish their ruin, in at least so far as sound and useful teaching is concerned.

For us, the union of medicine and state is quite as much to be dreaded, as the union of church and state. We believe it would retard rather than advance, the true interests of either. We speak for ourselves in this matter, and not for other governments. Our knowledge of our own peculiar institutions, our experience as to their workings, and especially the late experience of the college at Ann Arbor, convinces us that we are right in this matter, and that nothing is to be expected from state endowments, and very little from any state legislation.

The Medical Colleges.

So far as my experience and knowledge extends, the professors, and all employed as teachers in our medical colleges (I have no knowledge of the irregular medical colleges, and do not, therefore, allude to them,) are, with few exceptions, men of intelligence, of large practical experience; and if they are not all profound scholars, they are seldom wholly unqualified in the departments which they attempt to teach. We have in our country, scattered here and there, a great

(1) The lands granted and patented to 14 states, before the adoption of the Federal Constitution, from the date of the first grant to June 30, 1876, amount to 47,802,271.16 acres. In the year 1836 alone the sum of \$28,161,644.91, arising from surplus revenue, was divided (subject to call by the general government) among 26 states, several of which have devoted a part, or the whole, of the income from this fund to public education. *Report of the Com. of Education for 1876*, (From the "Sanitarian," for Sept. 1878.)

many thorough scholars; and medical colleges in most cases choose these men for their vacant professorships. It is generally for their own interest to do so; and such being the fact, they are certainly, as a rule, very likely to select the best men.

It is not intended to say that all of our best men have found places in the colleges. The colleges are not yet sufficiently numerous for that. There are, no doubt, as many good men outside of the colleges as there are in; and it does not always happen that the best men are chosen, but it must be admitted by any one familiar with the names of the gentlemen to-day connected with our medical colleges, that, in the main, the selection has been judicious.

Moreover, these men, holding the positions of professors in our medical colleges, are in general as sincerely desirous to raise the standard of medical education as are the members of the profession at large. I think I may say that they are more so. Each of these professors, in consequence of his own superior attainments in his special department, necessarily desires a higher standard of attainment in his pupils, and feels a greater mortification at their failure.

Nevertheless the fact remains, and is notorious, that these colleges graduate and license to practice, a great number of men who are totally unqualified; and you may find some difficulty in understanding how this fact can be made consistent with the reputation for honesty, intelligence and sagacity which I have accorded to a majority of the gentlemen who control these institutions. The arguments will naturally assume the character of an apology, or justification, and may be stated briefly as follows:

1. The present system of education in this country is, as I have shown, hereditary; having been imposed upon us while we were still in a colonial state. It is a sort of King's evil, therefore, for which we were not originally responsible. There are many features of American institutions, society and customs for which our venerated mother is alone or mainly responsible. Of most of these we are justly proud; but there are some things inherited from the same source which were of doubtful advantage to us. Such as the system of medical education, the system of slavery and the habit of boasting. In reference to either of these matters it does not become the people of Great Britain to lift the head and point the finger at us (1).

2. We have not only inherited an imperfect system of medical education, but the nature of our political institutions is such that the system has proved to be more especially unsuited to our wants, than it is to the wants of Great Britain. The federal or general government of these States refuses to assume the charge of education, and for reasons which lie at the foundation of our political system. This is not, and need not be, the fact in Great Britain, or under any other system of government known to us.

(1) Dr. Malpother, Prof. of Physiology in the Royal Col. of Surgeons, while paying our physicians and surgeons many flattering compliments, speaks of the "prevalence of quackery and the generally low state of the profession" among us. —*Med. Gazette* (New York), Nov. 26, 1870.

3. The States, as has already been said, have almost uniformly neglected to endow medical colleges, or to establish a proper standard for medical education. And it is questionable whether, in the light of our late experience, either the colleges or the profession at large would accept endowments upon such conditions as the States are almost certain to impose; namely, the supervision and control of all matters pertaining to the kind and character of the instruction to be given.

4. The result is, and must continue to be, that the management of medical education, is left entirely to the people, or perhaps I might say, to the profession. It is the same in the departments of Law and Divinity in this country. Each department being the author and administrator of its own system of education, and of licensing. (1)

Consequently, also, all the medical colleges, or almost all, are private corporations, or, to use an expressive Americanism, they are private "enterprises:" A term which implies a "venture:" And if it were not for this element of venture and enterprise in our profession, we would be without medical colleges altogether.

Let us consider the nature of these private enterprises, the claims which the public has upon them and their ability to meet and satisfy these claims.

Almost every medical college in this country has been planned, organized, equipped and carried on by ambitious and aspiring medical men; and there is not perhaps one, however it may have originated, which could have been sustained without their special efforts, money and personal sacrifice. From their often scanty means they have purchased grounds, erected or rented suitable buildings, and supplied them with the apparatus for teaching. And much of this property is now heavily encumbered with debts for which the faculties are responsible. They have established Hospitals and Dispensaries, performing their services in these, in all cases, without compensation, in order to secure clinical instruction for their pupils—they have labored for their students in season and out of season with an assiduity and devotion, which in almost any other calling would have commanded a large pecuniary return, and which we do not think has been surpassed, if indeed it has been equalled by the professors and teachers of medicine of the old world.

They have done all this, and much more in many cases, as a private venture, in a field left unoccupied by the state and general government with no hope or expectation of pay, beyond a slight pecuniary consideration, wholly unequal to the time and talent and money invested and the increase of their reputation as experts in the departments they attempt to teach.

As we have before stated, a few of the medical colleges have

(1) We have often heard it intimated by gentlemen of the Legal Profession and by gentlemen of the Profession of Divinity, that the condition of things is not much better with them than with us. They lament the decay of culture and courtesy in their ranks; but we must leave them to deal with their own problems in their own way. For the present we have enough to do to solve our own

attempted a forward movement : but their slow and unequal steps show conclusively, that while the head and heart are willing, and are urging them in the right direction, the feet are dragging heavy fetters. Not one of them has ventured a step beyond what was deemed safe in a pecuniary point of view. Nor will they ! Harvard, connected with the oldest University in the United States, and situated in the midst of the most wealthy and most highly educated people of our country, has, after much hesitation, and in the face of considerable opposition from its own faculty, adopted some of the needed reforms. But it will be remembered that Harvard Medical College has always had a larger proportion of Batchellors of Arts among its matriculants than any other American school, except perhaps the University of Virginia. The proportion being probably 30 or 35 per cent ; and the faculty, therefore, incurred very little risk of diminishing the number of their pupils, by demanding either the degree of Batchellor of Arts, or a not very exacting preliminary examination, conducted wholly by themselves. These gentlemen, who rank among our most distinguished medical men, will not pretend to say that in this, and the few other excellent reforms they have made, they have done all they would be glad to do, nor all that was needed.

In according to the University of Pa., also, praise for its recent action, we must not imagine that she has been actuated by a higher sense of duty, or a better code of morals, than has hitherto actuated her own board, or than continues to control the conduct of her sister colleges. This college actually fell back from her original standard ; a thing which, so far as I know, no other has done ; and this retrograde movement she has made twice. First in 1811, when she abolished her preliminary requirements, and second in 1852, when she "sorrowfully abandoned," after "six years of steadily diminishing classes," her slightly lengthened course of studies. (1)

Within the last year, having received a permanent endowment for one of her professorships, and a temporary guarantee for the remainder, she has ventured once more upon important reforms ; but, not to speak of other omissions, she has omitted what we regard as most important, namely, preliminary qualifications. In this respect Harvard, and two or three other colleges have done better than the University of Pa., if a preliminary examination by its own faculty has any value. "It was not thought feasible," says Dr. Pepper, "to insist upon this immediately ; but all are agreed that it must be established as soon as possible."

Why was not this feasible or possible immediately ? Why had not the "fullness of time" come for this as well as for the other reforms adopted ?

The only answer which suggests itself, is, that the permanent endowments are not secured, except in part ; and if there was any sort of a gate at the entrance, obstructing the free admission of students, even a turnstile, requiring one to pass at a time, the classes might

(1) Prof. Pepper's address.

diminish in size and the income from fees which contribute to support the guarantees, fall off. This would possibly cause the withdrawal of the temporary guarantees, and the upshot would be that the college would have to retrace its steps once more. The Faculty has done wisely, no doubt, to accept a free interpretation of the words of Epictetus, "and above all things, the door is open."

That for which my venerable and much respected Alma Mater deserves commendation is, the successful effort to endow even partly her professorships, and to secure a temporary guarantee of the remainder; but with these excellent buoys at her waist, she has no reason to take special credit to herself, because she ventures into a little deeper water than others have dared to, who have nothing but their own muscle to keep themselves afloat. (1)

No, Gentlemen, there is no very great difference in matters of duty or of conscience among medical men at home or abroad—in office or out of office—in professorships or out of professorships. They are all about equally desirous of improving the standard of medical education, but not many in either rank will hold the standard very high, or very long without something in their stomachs. A standard bearer must have something substantial inside his belt. (2)

(1) The first full permanent endowment of a professorship in this country was made by the widow of the late distinguished surgeon, Dr. J. Rhca Barton, of Philadelphia.

By a letter just received from Prof. Cabell, of the University of Va., I learn that the Medical Department of the University is mainly supported by an annual state appropriation of \$30,000; but that quite recently Mr. Corcoran, of Washington, has fully endowed one professorship, and has partially endowed two others.

The Commissioner of Education in his annual report for 1874, after enumerating the donations to educational institutions for the past year, says:—

"While the total benefactions to education in this country for the past year were, so far as ascertained, \$6,053,304, these several schools ("the medical—including all classes, also pharmacists and dentists") which so directly affect human life, have received for the year, only \$308,466, and a total income of \$24,000 from permanent funds, they being almost entirely dependent upon their tuition fees, which amount to \$520,593."

The commissioner further remarks:—"Considering how closely these schools affect the life of every individual in this country, many of the details reported will excite surprise."

In the report for 1876, the total amount of benefactions for educational purposes for the preceding year, so far as ascertained, was \$4,691,845, of which only \$36,750 had been made to the 102 colleges (including Irregulars, Colleges of Pharmacy and Dentistry). The value of the grounds, buildings, and apparatus belonging to the institutions is reported as \$3,489,800.

(2) That the medical men at large do not feel a deeper interest in this matter than do the professors in the medical colleges, and that they cannot be more safely entrusted with our educational interests than the colleges, unless other coincident changes are adopted, is sufficiently shown by the signal failure of county and state censors to do their duty when empowered to examine candidates and grant licenses. In this state they have never demanded a higher grade of qualifications than the colleges; and the writer has seen more than one case in which a candidate, rejected by the colleges, has been forthwith admitted by the

Now and then, in the course of my life, I have seen men who honestly thought they would revolutionize and reform this whole matter, at all hazards, if only they had the opportunity; but who having been made professors and given the opportunity, have done no more than those who preceded them. They were sincere in their convictions as to what ought to be and might be done; but after more or less prolonged and ineffectual struggles to extricate medical education from its toils, their limbs have gradually become relaxed, as if from sheer exhaustion, and they are to-day as quiet as the dead. "Let not him that girdeth on his harness boast himself as he that putteth off." For myself, I am obliged to say, that I have not always entertained or expressed the opinions I now hold upon this subject; but that a later and more careful study of the whole matter has forced the conviction that in endowments alone can be found a remedy equal to the emergency: And these endowments must be unconditional—carrying no such restraints as are almost certain to accompany State benefactions.

Whenever there shall be one or more medical colleges thoroughly endowed, situated in cities of sufficient population to ensure an abundance of clinical and dissection material, a reform will follow as complete as the most zealous student and lover of medicine could desire. The Faculties of our colleges will be occupied then solely in teaching, and they will readily accept of those two most important reforms—the complete separation of the business of teaching from the business of matriculation and of licensing to practice. Neither of which reforms, you may be quite sure, will be made while the professors are dependent upon the students for their fees. (1)

It is not certain but that for a few years the numbers would be small, but in an endowed school, this fact would not effect its permanency; and if it happened that for a time most medical students would seek a shorter, and easier, and cheaper road through those colleges whose curriculum was less severe, it would not be long before the public even, would understand the difference between the qualifications implied by the respective diplomas. As between those colleges which have already adopted partial reforms and those which have not, the difference is too little to ensure the attention and respect of the people; but when the difference is made as wide as it ought to be, it will be promptly recognized and appreciated.

Admitting then that we cannot look for help in this matter to either the Federal or State Governments; and that the medical colleges cannot or will not—for the facts remain the same, whatever the motives may be—admitting, I say that the colleges cannot or will not furnish us with better doctors without guarantees of better pay; admitting that these guarantees or endowments have not yet been

licensing boards. Neither county nor state censors are, in a majority of cases, chosen on account of any special qualifications which they are supposed to possess as examiners, and it cannot be thought strange, therefore, that they should license incompetent men. A stream cannot rise above its source.

(1) The same view of this matter was taken by Dr. Baldwin, in his address as President of the American Medical Association, only that he thought the Federal Government should undertake the endowment of the professorships, a thing which we consider impracticable, or rather impossible.

made, and are not likely to be made very soon ; what then remains to be done ? are we to fold our hands and let things take their own course whatever way they may drift ? I think not.

Public Sentiment.

There are many things which we can do more or less effectively. We can labor to create a sound public sentiment, which shall in some measure influence medical colleges and medical men, but more especially to create a sound sentiment among the young men who are contemplating the study and practice of medicine. They must be persuaded that it is unbecoming for them to enter upon the study of a learned profession without suitable classical and scientific knowledge and without mental discipline ; that it is impossible for them without this knowledge and discipline, to make any respectable attainments in the science of medicine—and that it is shameful for them to enter upon the practice of medicine, and attempt to minister to the physical sufferings of their fellow beings, without a competent knowledge of their science.

We are not the first to have discovered and to have employed this mode of meeting the difficulty. Almost the entire medical profession in this country, including, even most of that very large proportion who have not had the advantages of a thorough preliminary training, are urging its utility or necessity; the medical associations have, in all parts of the United States, again and again declared its importance, and especially is this true of the American Medical Association. The American medical journals have unanimously insisted upon radical changes in this respect; the professors and the alumni of medical colleges at their annual commencements, and in their social gatherings, have reiterated the same sentiment; but, as we have seen, the work of reform in this direction is not yet accomplished. They need further help and we have put our hands together to help them.

Our association is not intended as a substitute for any other association of medical men; but we propose to supplement their labors. We fully believe that we can be useful in some small degree, and we shall not cease our efforts or disband our organization, until the needed reforms are accomplished.

In conclusion, gentlemen, as an encouragement in our efforts by example, by diffusion of information, by argument, by persuasion, and by incentives to accomplish ends for which there are at present no other means provided, we are permitted to say, that the picture which we have presented to you of the condition of medical education in this country has a reverse, which has not been shown to you. While it is true that the legal or accepted standard is very low, so that multitudes are admitted to practise without proper qualifications, there are a great many notable exceptions. Many young men, educated in our colleges and hospitals, enter the practice of medicine with as much theoretical and practical knowledge of their profession as is demanded in the best schools of Europe; and most of these young men continue to labor in their studies and in original research, faithfully and successfully. The world, while looking with a certain

degree of surprise upon our system of education, has not been permitted to look upon our medical men, and our progress in original research and discovery with contempt. It is compelled to accept of the paradox, that in spite of our imperfect system of education, a large number have thoroughly mastered our science. The world acknowledges our discoveries, accepts our improvements and reads our books.

I offer these facts as an encouragement for us to proceed in our humble efforts to create a proper public sentiment, because these are the only means which can be at present employed; and especially because the pressure of public sentiment has been the sole means hitherto employed, and, as we have seen, it has not been without its fruits.

We have many ripe scholars and skillful physicians, who were educated at home, because:—Although preliminary education may not be demanded of the matriculants, it is often possessed by them:—Their education having been acquired either in established and accredited colleges, after a thorough and complete course of study, or under private instructors, and by their own unaided efforts. Our best students while actually employed in the study of medicine, work very hard; and the harder, perhaps, because of the brevity of the periods of instruction. Many of our graduates, also, do not enter upon the regular practise of their profession, until they have devoted several additional years to study and to hospital practise, under experienced teachers and practitioners.

I have examined young men for licenses to practise, and have been brought into contact with gentlemen of my own profession, educated abroad and at home, enough, to convince me that we have as thorough scholars and as able practitioners, of our own production, as can be found anywhere: and perhaps as many in proportion to the population as elsewhere, and all that are actually required for the wants of the people. But there is not one of these men, be they few or many, who have attained the knowledge of medicine or of surgery which they possess, without study. Genius and good common sense are valuable attributes, and contribute greatly to success in any sphere of life; but in medicine they can never take the place of solid scientific acquirements. They will not supply a knowledge of anatomy, physiology, chemistry, pathology, or of any one of the many branches of medical science; and without a knowledge of these subjects genius cannot guide the knife, or administer safely the medicine. If we have skillful surgeons and physicians they were made such by long and diligent study; and of the studies necessary for the acquisition of medical knowledge the preliminary academic and collegiate are of first importance.

Let me not be misunderstood. There is not one of those men known to you or to me, who have acquired undoubted skill, and a deserved reputation, except by long and diligent study. For it to be otherwise would be as impossible as to calculate eclipses without the previous study of the science of astronomy. There may be men who have acquired an extended reputation, and a remunerative practice, and who have never been students; but these men have not the skill

they are supposed to possess, nor a deserved reputation, and they are only the more dangerous because they have a reputation. Genius and worldly-wisdom are terms whose ample significance covers often such qualities as audacity, mendacity, cunning and legerdemain, or successful imposture.

I am honored by the splendid scholarship and well earned success of a large number of young men whose diplomas and licenses to practice I have signed. I am proud of the world-wide and merited reputation of many of my professional brethren, but it cannot be denied, that in the enormous excess which the figures have placed before us—an excess far beyond the wants of the people—there are to be found many thousands who have never been subjected to the proper tests of their ability, and from which sources the ranks of empiricism are mainly supplied; who are totally unqualified, and who ought not, in mercy to the people, and in justice to those who honestly earned their diplomas, ever to have received a license to practice.

It is too late to remedy this now. Nothing but a deluge would exterminate them; but we may at least hope to limit their propagation, by a more careful sifting of the seeds in future, and by intelligent culture of the growing plants.